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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,420	06/09/2006	Shifu Zhao	JEEKP103US	7408

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AMIN, TUROCY & CALVIN, LLP  
1900 EAST 9TH STREET, NATIONAL CITY CENTER  
24TH FLOOR,  
CLEVELAND, OH 44114

EXAMINER
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TSAY, MARSHA M

ART UNIT	PAPER NUMBER
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1656

NOTIFICATION DATE	DELIVERY MODE
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10/03/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket1@thepatentattorneys.com  
hholmes@thepatentattorneys.com  
osteuball@thepatentattorneys.com

<b>Office Action Summary</b>	Application No. 10/582,420	Applicant(s) ZHAO ET AL.	
	Examiner Marsha M. Tsay	Art Unit 1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

Claims 1-20 are pending.

#### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-2, 3-11, 16-20, drawn to human glyrichin and mouse glyrichin having the amino acid sequence depicted as SEQ ID NO: 1 and an antibacterial use.

Group II, claim(s) 1, 3-6, 8-11, drawn to *Daniorerio* glyrichin having the amino acid sequence depicted as SEQ ID NO: 3 and an antibacterial use.

Group III, claim(s) 1, 3-6, 8-11, drawn to *Anopheles gambiae* glyrichin having the amino acid sequence depicted as SEQ ID NO: 4 and an antibacterial use.

Group IV, claim(s) 1, 3-6, 8-11, drawn to *Drosophila melanogas* glyrichin having the amino acid sequence depicted as SEQ ID NO: 5 and an antibacterial use.

Group V, claim(s) 1, 3-6, 8-11, drawn to *Caenorhabditis elegans* glyrichin having the amino acid sequence depicted as SEQ ID NO: 6 and an antibacterial use.

Group VI, claim(s) 1, 3-6, 8-11, drawn to *Caenorhabditis elegans* glyrichin having the amino acid sequence depicted as SEQ ID NO: 7 and an antibacterial use.

Group VII, claim(s) 1, 3-6, 8-11, drawn to *Schizosaccharomyces pombe* glyrichin having the amino acid sequence depicted as SEQ ID NO: 8 and an antibacterial use.

Group VIII, claim(s) 1, 3-6, 8-11, drawn to *Sacchromyces cerevisiae* glyrichin having the amino acid sequence depicted as SEQ ID NO: 9 and an antibacterial use.

Group IX, claim(s) 1, 3-6, 8-11, drawn to *Arabiopsis thaliana* glyrichin having the amino acid sequence depicted as SEQ ID NO: 10 and an antibacterial use.

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Group X, claim(s) 1, 3-6, 8-11, drawn to *Plasmodium falciparum* 3D7 glyrichin having the amino acid sequence depicted as SEQ ID NO: 11 and an antibacterial use.

Group XI, claim(s) 1, 3-6, 8-11, drawn to *Plasmodium yoelii yoelii* glyrichin having the amino acid sequence depicted as SEQ ID NO: 12 and an antibacterial use.

Group XII, claim(s) 1, 3-6, 8-11, drawn to *Magnaporthe grisea* glyrichin having the amino acid sequence depicted as SEQ ID NO: 13 and an antibacterial use.

Group XIII, claim(s) 1, 3-6, 8-11, drawn to *Neurospora crassa* glyrichin having the amino acid sequence depicted as SEQ ID NO: 14 and an antibacterial use.

Group XIV, claim(s) 12, drawn to a use of applying glyrichin in preparing drugs for prevention and/or treatment of bacterial infectious disease or human or livestock.

Group XV, claim(s) 13, drawn to a use of applying glyrichin in preparing drugs for prevention and/or treatment of potentially bacterial infectious disease of different kinds of creatures.

Group XVI, claim(s) 14, drawn to a use of applying glyrichin in producing transgenic creatures that can defend against diseases and pets.

Group XVII, claim(s) 15, drawn to a use of applying glyrichin in preparing derivatives, or antagonists as well as its ligands and antibodies of glyrichin.

The inventions listed as Groups I-XVII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

(1) the special technical feature of Group I is the structure and function of human glyrichin and mouse glyrichin (SEQ ID NO: 1); (2) the special technical feature of Group II is the structure and function of *Daniorerio* glyrichin (SEQ ID NO: 3); (3) the special technical feature of Group III is the structure and function of *Anopheles gambiae* glyrichin (SEQ ID NO: 4); (4) the special technical feature of Group IV is the structure and function of *Drosophila melanogaster* glyrichin (SEQ ID NO: 5); (5) the special technical feature of Group V is the structure and function of *Caenorhabditis elegans* glyrichin (SEQ ID NO: 6); (6) the special technical feature of Group VI is the structure and function of *Caenorhabditis elegans* glyrichin (SEQ ID NO: 7); (7) the special technical feature of Group VII is the structure and function of *Schizosaccharomyces pombe* glyrichin (SEQ ID NO: 8); (8) the special technical feature of Group VIII is the structure and function of *Saccharomyces cerevisiae* glyrichin (SEQ ID NO: 9); (9) the special technical feature of Group IX is the structure and function of *Arabidopsis thaliana* glyrichin (SEQ ID NO: 10); (10) the special technical feature of Group X is the structure and function of *Plasmodium falciparum* 3D7 glyrichin (SEQ ID NO: 11); (11) the special technical feature of Group XI is the structure and function of *Plasmodium yoelii yoelii* glyrichin (SEQ ID NO: 12); (12) the special technical feature of Group XII is the structure and function of *Magnaporthe grisea* glyrichin (SEQ ID NO:

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13); (13) the special technical feature of Group XIII is the structure and function of *Neurospora crassa* glyrichin (SEQ ID NO: 14); (14) the special technical feature of Group XIV is the manufacture of drugs for humans; (15) the special technical feature of Group XV is the manufacture of drugs for different kinds of creatures; (16) the special technical feature of Group XVI is producing a transgenic animal; (17) the special technical feature of Group XVII is the manufacture of derivatives and antagonists of glyrichin. As each Group requires a special technical feature not shared with the other, they lack unity of invention.

Additionally, Groups XIV-XVII are subject to further restriction. Applicant is required to further elect a specific glyrichin, i.e. a specific SEQ ID NO. This is NOT an election of species. Polypeptides are structurally distinct compounds and are unrelated to each other. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each amino acid sequence is presumed to represent an independent and distinct invention, subject to restriction requirement pursuant to 35 U.S.C. 121 and 37 C.F.R. 1.141. By statute, “[i]f two or more independent and distinct inventions are claimed in one application, the Commissioner may require the application to be restricted to one of the inventions.” 35 U.S.C. 121. Pursuant to this statute, the rules provide that “[i]f two or more independent and distinct inventions are claimed in a single application, the Examiner in his action shall require the Applicant...to elect that invention to which his claim shall be restricted.” 37 C.F.R. 1.142(a). See also C.F.R. 1.141(a). It is noted that searching more than one of the claimed patentably distinct sequences represents a serious burden for the Office.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marsha M. Tsay whose telephone number is 571-272-2938. The examiner can normally be reached on M-F, 9:00am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Kathleen Kerr Bragdon can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 26, 2007

*R. Monshi*  
MARYAM MONSHIPOURI, PH.D.  
PRIMARY EXAMINER